

Appl. No. 10/666,188  
Amdt. Dated 23 December 2004  
Reply to Office action of 29 September 2004 and  
Advisory Action of 16 December 2004

### **REMARKS/ARGUMENTS**

Applicant has carefully considered the Final Office Action mailed on 29 September 2004 and the Advisory Action mailed on 16 December 2004, wherein claims 36-44 were rejected under 35 USC 102 (e), and claims 36-42 and 44 were rejected under 35 USC 102 (b). In the Advisory Action, it was indicated that Applicant's arguments had been considered but that the Examiner was not persuaded and was standing behind the statements in the Final Office Action. Applicant continues to traverse the rejection of the prior claims. However, to expedite prosecution, Applicant has amended claims 36 and 44, canceled claim 38, and added new claims 45-47. Claims 36-37 and 39-47 are under consideration.

#### **Claims 36-44**

Applicant has canceled claim 38. Applicant respectfully traverses the rejection of Claims 36-37 and 39-44 under 35 USC 102(e) as being anticipated by Wofford et al. US6260999. Applicant also respectfully traverses the rejection of Claims 36-37, 39-42, and 44 under 35 USC 102(b) as being anticipated by Brown et al. US5751781 and as being anticipated by Liebetruhl 5,377,252.

For anticipation under 35 USC 102, the reference must teach every aspect of the claimed invention, either explicitly or impliedly. Applicant submits that the cited references do not, either individually or in combination, teach, suggest, or disclose the independent claim 36 and claim 44 recitations of (with emphasis added):

36. (currently amended) A radiation imaging system comprising :  
a movable radiation source;  
a radiation detector;  
a collimator comprising an adjustable geometry aperture assembly;  
a collimator positioning apparatus configured to synchronize an adjustment of the aperture geometry with the movement of said radiation source and to coordinate the adjustment of the aperture geometry with the radiation source position so as to **limit the incident radiation to a predetermined exposure area at said detector.**

44. (currently amended) A method for radiation imaging, comprising:  
moving a radiation source in a plurality of radiation source positions;  
adjusting an aperture by synchronizing the aperture geometry adjustment with the movement of said radiation source and coordinating at least one of the position and the shape of said aperture with the respective position of said radiation source such that a radiation beam emanating from said radiation source is collimated to **limit the incident radiation to a predetermined exposure area at a radiation detector;** and  
detecting the radiation beam on the radiation detector.

Wofford appears to relate to a linear accelerator for radiation therapy. Per column 1, lines 29-34, the goal in such systems is to hit a specific region of the patient with a treatment beam. The detector appears to be used for determining whether the patient region needing treatment is within the treatment beam. No mention is made of limiting Incident radiation to a predetermined exposure area at a detector.

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Brown similarly appears to relate to a linear accelerator (column 1, lines 15-18) for patient treatment with a goal of ensuring the target area of the patient receives maximum radiation and the surrounding healthy tissue has minimal exposure. Brown references 100 in Fig. 1 as a radiotherapy apparatus (column 1, line 8) and in FIG. 12 as an image detection device for providing treatment verification (column 15, lines 20-26). Applicant can find no reference to limiting incident radiation to a predetermined exposure area at a detector.

Liebethuth also appears to describe a form of aperture adjustment for a purpose different than that of limiting incident radiation to a predetermined exposure area at a detector. Instead Liebethuth is directed to a thickness as described in the paragraph from column 2, line 52, through column 3, line 19.

Accordingly, Applicant respectfully submits that independent Claims 36 and 44 define allowable subject matter over the applied art. Claims 37, and 39-43 depend directly or indirectly from claim 36 and hence are similarly allowable. Withdrawal of the rejections is respectfully requested, and allowance of the Claims 36-44 is respectfully solicited.

#### Claim 45

Support for the material of claim 45 is present in paragraphs 20, 21, and 35, for example, in combination with claim 36 as originally recited. Claim 45 includes language "to limit the incident radiation of the tomosynthesis system to a predetermined exposure area at said detector" and therefore claim 45 and claims 46-47 which depend therefrom are believed to be in condition for allowance over the cited references.

#### Summary

In view of the foregoing, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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